

Abstract of the Disclosure:

A radio station optimizes the impedance. An antenna of a transmitter of the radio station matches an output impedance of a power amplifier by adding an impedance with a variable reactance. A processor adjusts the variable reactance of the impedance according to an output signal of the power amplifier. The impedance with the variable reactance preferably includes either a plurality of inductors and capacitors, variable inductors and capacitors, or a plurality of microstrip lines. The processor calculates an optimum value for the variable reactance according to a measurement of the output signal of the power amplifier and stores those values for those measured values. In this way, a table is created, so that when the output signal is again measured the processor can use this table to determine which variable reactance will lead to impedance matching.

LDP/bb